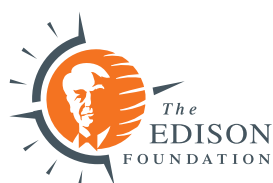




UTILITY-SCALE SMART METER DEPLOYMENTS, PLANS, & PROPOSALS

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IEE Report
May 2012



INSTITUTE FOR
Electric Efficiency

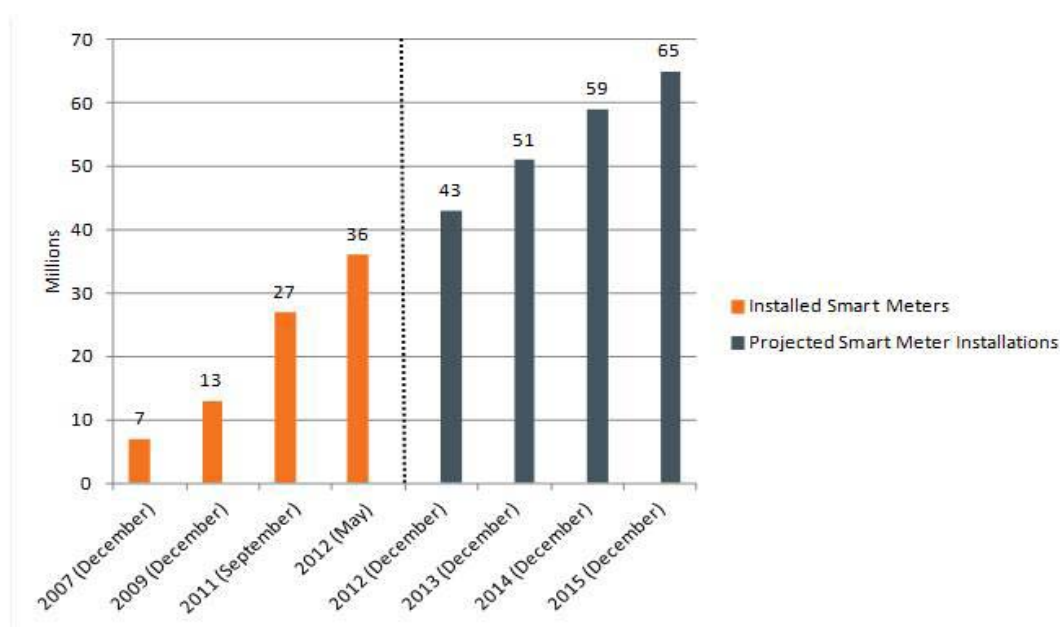
EXECUTIVE SUMMARY

UTILITY-SCALE SMART METER DEPLOYMENTS, PLANS & PROPOSALS

Electric utilities are making steady progress in upgrading their customers' analog electric meters with digital 'smart' meters,* according to the latest report from the Institute for Electric Efficiency (IEE). As of May 2012, IEE found that almost one-in-three households now have a smart meter.¹ This is up from about one-in-four households in September 2011. By mid-decade, IEE projects that more than half the households in the country will have a smart meter.

This report summarizes current smart meter installations, as well as planned deployments and proposals, by investor-owned utilities, large public power utilities, and some rural electric cooperatives. Based on submitted and approved AMI business plans, responses to survey questions and other public information, IEE finds that as of May 2012, 36 million smart meters have been installed and IEE estimates that approximately 65 million smart meters will be deployed by 2015.

Figure 1. Smart Meter Installations in the US: 2007-2015 (millions)



Source: Institute for Electric Efficiency, Federal Energy Regulatory Commission²

Figure 1 illustrates the historic and estimated path of smart meter installations in the US through 2015. This represents approximately 675,000 smart meters installed per month between now and the end of 2015.

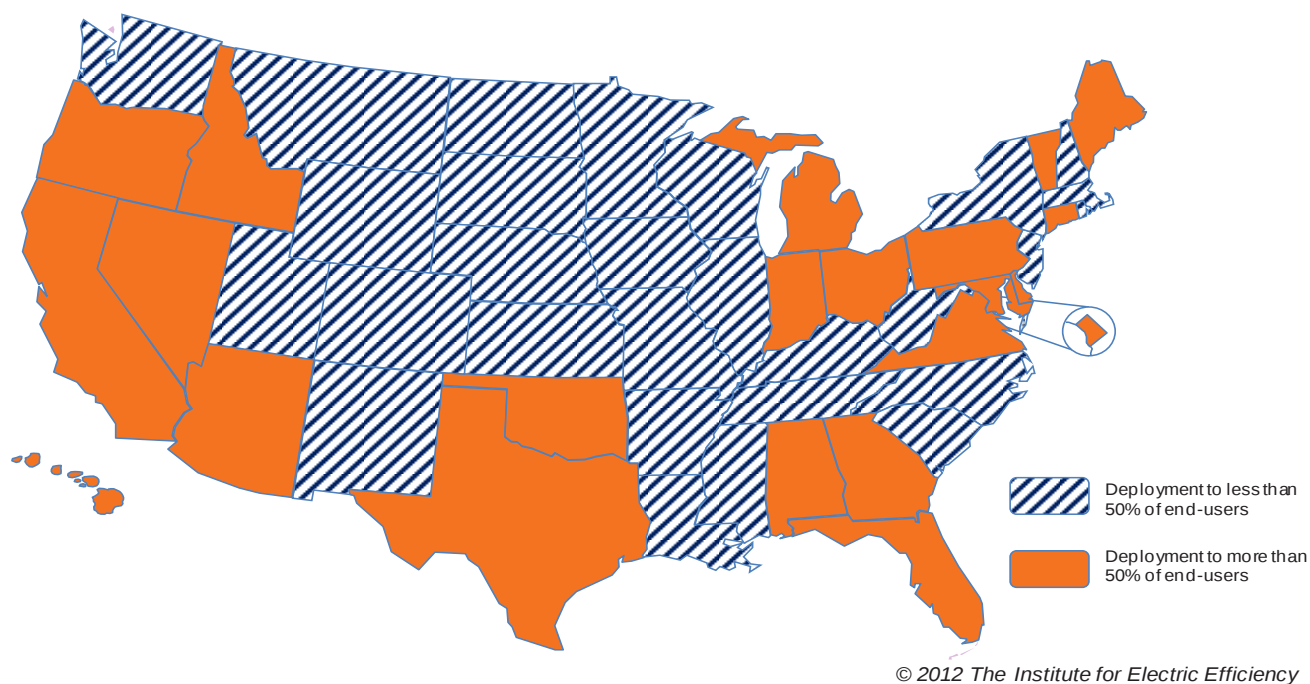
*A smart meter is a digital electric meter that measures and records usage data hourly, or more frequently, and allows for two-way communications between the utility and the customer.

The electric power sector is providing benefits to customers through information gathered by smart meters. By the end of 2012, 22 utilities in 16 states will have smart meters fully deployed to their entire customer base, representing 29 million customers. Benefits include: customer access to energy usage information, customized tips on energy management, enhanced outage restoration, and other benefits.

Millions of utility customers already have their energy usage data recorded by smart meters and the industry is working to translate the detailed smart meter data into customer-friendly information. One example of this is the Green Button Initiative, which is a voluntary industry effort to create a standard format for energy consumption data gathered by both smart meters and AMR meters. As of May 2012, 21 utilities and electricity suppliers in almost half the states in the country have committed to bringing the Green Button to 30 million customers. Already, almost 10 million customers have access to their energy consumption data in the Green Button format.



Figure 2. Expected Smart Meter Deployments by State by 2015



Note: Figure 2 shows the extent of smart meter deployments by state by 2015 that are either completed, underway, or planned. This map does not include automatic meter reading (AMR) installations. The data that is represented in this report was compiled February - April 2012. Readers are encouraged to verify the most recent developments by contacting the utility or regulator.

For inquiries or to provide feedback, please contact Adam Cooper at acooper@edisonfoundation.net. For further information, please visit <http://www.edisonfoundation.net/IEE/>.

SMART METER INSTALLATIONS AND PROJECTED DEPLOYMENTS BY UTILITY

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
AEP	Total AR IN KY LA MI OH OK TN TX VA WV	657,000	5,200,000	AEP plans to deploy smart meters to 5.2M customers served by their operating companies. To-date, AEP's Indiana Michigan Power (I&M) subsidiary has deployed 9,800 meters to customers in South Bend, IN; AEP Ohio has deployed 131,900 in the Columbus OH area; AEP Texas has deployed 500,300 meters and will deploy 924,000 meters by 2013; and AEP's Public Service Company of Oklahoma (PSO) has deployed 15,000 meters in Owasso, OK. Timing for the remaining deployments will depend on specific conditions in each of the operating company subsidiaries.	AEP Corporate Sustainability Report 2009 ²³ ; AEPOhio.com ⁴ ; AEP.com ⁵ ; IEE Smart Meter Survey Q1 2012
Allete (d/b/a Minnesota Power)	Total MN	6,500	8,000	Allete plans to invest \$3M and deploy 8,000 smart meters in northeast Minnesota. The utility also intends to purchase automation equipment and begin a dynamic pricing program. \$1.5M of the project cost is covered by DOE SGIG funds.	Minnesota St. Paul Business Journal ⁶ ; SmartGrid.gov ⁷
Alliant Energy	Total IA WI	463,000	463,000	In 2010, Wisconsin Power & Light, a subsidiary of Alliant Energy, reached full deployment of 462,000 meters. Interstate Power & Light in Iowa has a 1,000 meter pilot implementation to support the Sustain Dubuque Initiative. Additional deployment in IA and MN are on hold.	IEE Smart Meter Survey Q1 2012
Ameren Illinois	Total IL		780,000	In April 2012, Ameren Illinois announced plans to install 780,000 smart meters over the next ten years, covering over 60 percent of their Illinois customers.	Bloomberg Businessweek ⁸
Austin Energy	Total TX	418,900	418,900	Austin Energy's smart meter program was approved in 2008, full deployment to 418,900 customers was achieved in 2009.	greentechgrid.com ⁹ ; IEE Smart Meter Survey Q1 2012
Avista Utilities	Total ID WA	13,400	13,400	Avista has installed 13,400 smart meters in Pullman, WA as part of the Pacific Northwest Smart Grid Demonstration Project, a 5-state demonstration project leveraging DOE SGDGF funds. As of September 2011, data from Avista smart meters will be used for billing purposes.	Avista Utilities ¹⁰ ; Email correspondence with Avista's SmartGrid Project Director
Arizona Public Service	Total AZ	771,700	1,100,000	Currently, APS has over 771,000 meters installed and expects system wide deployment of 1.1M meters in 2014.	APS ¹¹ ; IEE Smart Meter Survey Q1 2012

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Baltimore Gas & Electric	Total MD	3,000	1,360,000	BG&E piloted 3,000 smart meters in 2008 and was awarded \$200M in SGIG funds to support a full deployment. The utility will begin deploying smart meters in 2012 with full deployment of 1.36M meters by 2014. Installation cost reimbursement will not occur until 2014, pending commission approval.	BGE Installation Schedule ¹² ; BG&E press release ¹³ ; Baltimore Sun ¹⁴ ; IEE Smart Meter Survey Q1 2012
Bangor Hydro-Electric	Total ME	113,500	113,500	Bangor Hydro Electric has fully deployed 113,500 smart meters in its service territory.	Itron press release ¹⁵ ; www.bhe.com ¹⁶
Black Hills Energy	Total CO	93,300	93,300	Black Hills Energy has installed 93,300 smart meters in CO and is now testing direct load control and peak time rebate offers with their residential customers. The utility received \$6.1M in SGIG funds (\$12.2M total project value).	Black Hills Energy ¹⁷
Black Hills Power	Total SD WY	69,000	69,000	Black Hills Power has installed 69,000 smart meters in SD and WY. The utility was awarded \$9.6M in SGIG matching funds to install smart meters, upgrade information communication technology infrastructure, and other equipment.	smartgrid.tcmnet.com ¹⁸
CenterPoint	Total TX	2,190,700	2,200,000	As of March 31, 2012, CenterPoint had installed 2,190,700 smart meters with full deployment of 2.2M meters to occur by the end of 2012. CenterPoint received approval in 2008 to install an advanced metering system across its service territory, and was awarded \$150M in SGIG funds (\$639M total project value).	PUCT Project 36699 ¹⁹
Central Maine Power Company	Total ME	607,000	650,000	Central Maine Power Company has installed 607,000 smart meter network. Full deployment is scheduled for 2012. The utility was awarded \$96M in SGIG funds (\$192M total project value).	Boston.com ²⁰ ; Central Maine Power Company press release ²¹ ; IEE Smart Meter Survey Q1 2012
Cheyenne Light, Fuel & Power	Total WY	38,500	38,500	Cheyenne Light, Fuel & Power completed a 38,500 smart meter installation in 2011. The utility was awarded \$5M in SGIG funding.	Cheyenne Light, Fuel & Power ²²
Cleco Power	Total LA		277,000	Cleco Power intends to begin installing 277,000 smart meters mid-2012 with full deployment scheduled to be complete mid-2013. \$20M in SGIG funds (\$72.9M total project value) was awarded to the utility.	Louisiana Public Service Commission ²³
Commonwealth Edison	Total IL	130,000	4,000,000	ComEd ran a 130,000 smart meter pilot in the greater Chicago area and filed a full deployment AMI Plan with the ICC in April 2012. A decision is expected June 2012.	ComEd website ²⁴ ; Chicago Business ²⁵ ; IEE Smart Meter Survey Q1 2012

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Connecticut Light & Power	Total CT	1,500	1,200,000	CL&P ran a 1,500 smart meter pilot in Summer 2009 and filed plans to deploy smart meters to all 1.2M customers between 2012 and 2016. In its proposed offerings, CL&P customers can select different dynamic pricing structures: TOU and CPP rates for all customers, and PTR for low income customers only. Full deployment is dependent on the completion of AMI standards and subsequent vendor selection.	CL&P website ²⁶ ; Docket No. 05-10-03RE01
Consolidated Edison	Total NY		1,500	Con Edison is piloting a \$6M smart grid program in northwest Queens. 1,500 meters will be deployed and 300 customers will test in-home displays that monitor energy usage by appliance.	Con Ed press release ²⁷
Consumers Energy	Total MI	6,500	1,800,000	In November 2008 Consumers signed an agreement with IBM to help plan, deploy, and test an AMI and field pilot network. By 2019 the utility anticipates converting its 1.8M electric customers to smart technology.	smartgridnews.com ²⁸ ; IEE Smart Meter Survey Q1 2012
CPS Energy	Total TX	40,000	700,000	CPS Energy intends to install 700,000 smart meters by 2016.	CPS Energy ²⁹ ; eMeter
Dominion	Total VA	100,000	2,400,000	Dominion has installed 100,000 smart meters in Midlothian, Charlottesville, and Northern Virginia to demonstrate the technology and customer benefits of smart meters. Dominion is awaiting findings from their demonstration efforts prior to filing for full deployment of 2.4M meters.	Richmond Times Dispatch ³⁰ ; IEE Smart Meter Survey Q1 2012
DTE	Total MI	657,000	2,100,000	DTE has deployed 657,000 meters to support its “SmartCurrents” program. DTE received \$84M in SGIG funds (\$168M total project value) and intends to have more than 1M meters installed by end of 2013 with full deployment of 2.1M smart meters at a later date.	DTE SmartCurrents FAQs ³¹ ; Detroit News ³² ; IEE Smart Meter Survey Q1 2012
Duke Energy	Total IN KY NC OH SC	386,100	1,500,000	Duke has installed 330,700 smart meters in Ohio after receiving approval from the state commission in May 2010 to deploy 700,000 meters. Kentucky has 38,500 meters; North Carolina has 14,500; and South Carolina installations were recorded at 2,400. In Indiana, a 40,000 pilot is pending with the IURC, and Duke is considering a full scale deployment (800,000 meters) at a later date. Duke was awarded \$200M in SGIG funds for a grid modernization project that can support the deployment of 1.5M smart meters in Indiana and Ohio.	Duke press release ³³ ; IEE Smart Meter Survey Q1 2012
Entergy Louisiana	Total LA	12,400	12,400	Entergy Louisiana is conducting a pilot of smart meters to test the technology.	EIA Form 826--Advanced Metering Spreadsheets

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Entergy New Orleans	Total LA	4,900	7,400	Entergy has installed 4,900 smart meters to pilot the meters and dynamic pricing in low-income households in New Orleans. The utility was awarded \$5M in SGIG funding (\$10M total project value) to support this project.	Entergy New Orleans press release ³⁴ ; smartgrid.gov
FirstEnergy Corp	Total MD OH PA WV	6,100	2,457,000	FirstEnergy Corp will use a \$57.4M SGIG award and matching company money for AMI efforts in Ohio and Pennsylvania. FirstEnergy via Allegheny launched pilots in Morgantown, WV and Urbana, MD to test smart meters and thermostats (1,100 meters installed). Further deployment in WV and MD have yet to be determined. In PA, Act 129 (2008) requires electric distribution companies with more than 100,000 customers to file a smart meter technology procurement and installation plan. FirstEnergy subsidiaries in Pennsylvania include Met-Ed, Penelec, Penn Power, and West Penn Power accounting for approximately 3.6 million customers. FirstEnergy subsidiary The Illuminating Company in Cleveland, OH installed 5,000 meters as part of a 44,000 meter pilot.	Public Utility Commission of Ohio press release ³⁵ ; Allegheny Power 2008 Annual Report ³⁶ ; cleveland.com ³⁷ MD H.B. 1072; PA Implementation Order & Tentative Order, June 2009 (Docket M-2009-2092655)
Florida Power & Light Company	Total FL	3,000,000	4,500,000	NextEra Energy has deployed 3,000,000 smart meters as part of their Energy Smart Florida program. Full deployment of 4.5M smart meters is expected by the end of 2013, supported by \$200M in SGIG funds.	Sun Sentinel ⁵² ; IEE Smart Meter Survey Q1 2012
Hawaii Electric Company	Total HI	71,700	451,000	HECO is planning to deploy smart meters throughout their service territory by mid-decade using company funding. Currently, 71,700 smart meters have been deployed.	Energy Efficiency News ³⁸ ; HECO press release ³⁹ ; eMeter Strategic Consulting
Idaho Power	Total ID OR	496,000	496,000	Idaho Power piloted 25,000 smart meters in 2005. Full deployment to 480,000 customers in Idaho was completed in December 2011. In 2010, all of Idaho Power's 16,000 Oregon customers received a smart meter. Idaho Power received \$47M (\$94M total program cost) in SGIG funding.	Idaho Power ⁴⁰ & AMI FAQ page ⁴¹ ; Idaho Power AMI deployment map ⁴² ; IEE Smart Meter Survey Q1 2012
Indianapolis Power & Light	Total IN	9,800	10,400	As part of IPL's residential focused Smart Energy Project, 9,800 of 10,400 smart meters have been installed throughout IPL's service territory. IPL was awarded \$20M in SGIG funds (total program cost, \$48.78M) to deploy smart meters along with complementary technologies.	IPL press release ⁴³ ; SmartGridNews.com ⁴⁴ ; IEE Smart Meter Survey Q1 2012
Los Angeles Department of Water and Power	Total CA	9,200	76,500	Los Angeles DWP intends to implement an AMI plan for 64,000 residential customers with monthly energy consumption over 1200 kWh; 10,000 high turn-over residencies; and 2,500 critical care residential customers by 2013.	California Energy Commission ⁴⁵ ; EIA Form 826--Advanced Metering Spreadsheets

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
JEA	Total FL	3,000	40,000	JEA is moving forward with smart meters and will provide a dynamic pricing pilot and consumer engagement software for 3,000 customers. The utility was awarded \$13M in SGIG funding.	DOE Recovery Act ⁴⁶
Kansas City Power & Light	Total MO	14,000	14,000	KCP&L completed the installation of 14,000 smart meters in 2011 for their SmartGrid Demonstration project in midtown Kansas City, MO. The project also includes piloting in-home displays, demand response thermostats, a web portal, and investments in distributed energy resources, distribution and substation automation. Project concludes in 2014.	IEE Smart Meter Survey Q1 2012
Louisville Gas & Electric	Total KY	2,000	2,000	LG&E is in the third year of a Responsive Pricing and Smart Meter pilot program. 100 customers have time of use (TOU) pricing.	LGE POWERSource newsletter ⁴⁷
Madison Gas & Electric	Total WI	4,400	4,400	MGE is installing a small-scale smart grid network, including meters, EV charging stations, and in-home energy management systems. \$5.5M in SGIG funds (\$11M total project value) were awarded to the utility to support their efforts.	MGE press release ⁴⁸ ; SmartGrid.gov ⁴⁹
National Grid	Total MA		15,000	National Grid submitted a revised proposal to the DPU for its 15,000 smart meters pilot in Worcester in February 2012. Pilot deployment expected to begin June 2012. National Grid withdrew their modified smart grid proposal in NY February 2011.	National Grid press release ⁵⁰ ; National Grid Modified Smart Meter Pilot Program ⁵¹
Nebraska Public Power District	Total NE	45,000	68,500	NPPD is in the process of installing smart meters throughout the state. 68,500 smart meters will be installed by 2015.	NPPD AMI FAQ ⁵³ ; Smart Grid Investment Clearinghouse ⁵⁴ ; IEE Smart Meter Survey Q1 2012
NSTAR	Total MA	400	2,800	NSTAR has installed 400 meters in the greater Boston area with plans to install 2,800 smart meters in Newton, Hopkinton, and Jamaica Plains as part of a \$16M pilot project approved by the Massachusetts Department of Public Utilities. The project is expected to run through 2012. NSTAR's investments satisfy the 2008 Green Communities Act requiring that all public utilities in Massachusetts develop and implement a smart grid pilot.	Worcester Business Journal ⁵⁵ ; NSTAR press release ⁵⁶
NV Energy	Total NV	781,000	1,300,000	NV Energy has installed 781,000 smart meters with full deployment of 1.3M smart meters expected by end of 2012. \$138M in SGIG funds (\$301M total project value) was awarded to the utility.	Las Vegas Sun ⁵⁷ ; IEE Smart Meter Survey Q1 2012

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Oklahoma Gas & Electric	Total AR OK	633,000	833,000	OG&E has installed 610,000 smart meters in Oklahoma with full deployment of 775,000 smart meters and dynamic pricing options available by 2014. 23,000 of 58,000 meters have been deployed in Arkansas. OGE received \$130M in SGIG funds (\$366M total project cost).	smartmeters.com ⁵⁸ ; AR Docket 10-109-U, Order No.8; September 2011 email correspondance
Oncor	Total TX	2,534,000	3,400,000	Oncor has installed over 2.5M smart meters with full deployment of 3.4M meters expected by the end of 2012.	PUCT Project 36157 ⁵⁹
Pacific Gas & Electric	Total CA	4,696,000	5,250,000	As of August 2011 PG&E had installed 4.7M smart meters. Customers with smart meters can participate in PG&E's SmartRate plan, a voluntary critical peak pricing (CPP) rate plan that will help manage system load during hot summer days. The utility expects to reach full deployment of 5.25M meters by the end of 2012.	PG&E Smart Meter Program Data ⁶⁰
Pacific Northwest Smart Grid Demonstration Project	Total ID MT OR WA WY	13,400	60,000	Avista, NorthWestern Energy, Portland General Electric, and Seattle City Light represent the investor-owned and large public power utilities involved in a 5-year project that will provide two-way communication between distributed generation, storage, demand assets, and the existing grid. Note: Meters related to Avista, PGE and other electric distribution companies included in the Pacific Northwest Smart Grid Demonstration Project total are not double counted in the summary total.	Bonneville Power Authority ⁶¹ ; Pacific Northwest Smart Grid ⁶²
PECO Energy Company	Total PA	5,000	1,600,000	PECO intends to upgrade its communications infrastructure to support a smart meter network with initial installation of 600,000 smart meters starting in early 2012. PECO intends to fully deploy smart meters to 1.6M customers. PECO received \$200M in SGIG funding to support their smart grid efforts.	PECO ⁶³ ; Philly.com ⁶⁴
PEPCO Holdings	Total DC DE MD	680,900	1,710,000	PEPCO has reached full deployment in Delaware with 309,400 smart meters installed. 252,100 of 280,000 smart meters have been installed in DC with full deployment expected by the end of 2012. Maryland deployment has just begun with 119,400 of 570,000 meters installed; full deployment slated for end of 2012. PEPCO received \$168.1M in SGIG funds to support the \$300M cost of the DC and MD projects. There is no active AMI project in New Jersey.	Washington Post ⁶⁵ ; Reuters ⁶⁶ ; PEPCO press release ⁶⁷ ; IEE Smart Meter Survey Q1 2012
Portland General Electric	Total OR	816,000	816,000	PGE's smart meter program was approved in 2008; full deployment was completed in 2010.	PGE Earnings Report ⁶⁸ ; PGE Smart Meters web page ⁶⁹

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
PPL	Total PA	1,404,000	1,404,000	PPL is in compliance with PA Act 129 and has installed AMI in its service territory. The PA electric distribution companies are engaged in a collaborative process to develop standards and formats for electronic communication of meter data and access by customers and 3rd parties. Once standards are set customers will be able to access their interval data readings over the web.	EIA Form 826--Advanced Metering Spreadsheets; eMeter Strategic Consulting; PA Docket No. M-2009-2092655; IEE Smart Meter Survey Q1 2012
Progress Energy	Total FL NC SC		155,000	Progress Energy is planning to deploy 155,000 smart meters by 2013. Progress will install 60,000 smart meters in NC, 12,000 meters in SC, and 83,000 in Florida. Progress received a \$200M SGIG award to assist with meter deployment and other customer-facing initiatives.	Progress Energy press release ⁷⁰ ; IEE Smart Meter Survey Q1 2012
PSE&G	Total NJ		17,500	PSE&G received approval from NJ Board of Public Utilities to install 17,500 smart meters in three Passaic County towns.	PR Newswire ⁷¹
Puget Sound Energy	Total WA		700	PSE is testing a demand response pilot program with 700 customers on Bainbridge Island	PSE press release ⁷²
Sacramento Municipal Utility District	Total CA	604,000	618,000	SMUD has installed 604,000 smart meters and intends to install 618,000 smart meters throughout their service territory along with dynamic pricing, 100 EV charging stations, and 50,000 demand response control devices by 2012. SMUD was awarded \$127.5M in SGIG funds (\$307.7M total project value) to support their efforts.	Sac Observer ⁷³ ; DOE Recovery Act, Smart Grid ⁷⁴ ; IEE Smart Meter Survey Q1 2012
Salt River Project	Total AZ	792,500	935,000	Salt River Project has 792,500 smart meters installed and intends to have full deployment of 935,000 meters by March 2013. Their next step is to provide a dynamic pricing structure to their customers. Salt River Project received \$56.8M in SGIG funds (total program cost, \$114M).	SRP Smart Meter Page ⁷⁵ ; Phoenix Business Journal article ⁷⁶ ; IEE Smart Meter Survey Q1 2012
San Diego Gas & Electric	Total CA	1,364,000	1,400,000	SDG&E has 1.36M smart meters installed with full deployment of 1.4M scheduled to occur by the end of 2011. SDG&E was awarded \$28.1M in SGIG funds (\$60.1M total project value).	SDG&E Smart Meter website ⁷⁷ ; IEE Smart Meter Survey Q1 2012
Southern California Edison	Total CA	3,900,000	5,300,000	As of March 2012, SCE had installed 3.9M smart meters with full deployment of 5.3M expected by 2012. SCE's SmartConnect program will use the meters to offer Critical Peak Pricing (CPP) and Peak Time Rebate (PTR) rates to customers with enabling technologies.	SCE SmartConnect home page ⁷⁸ ; IEE Smart Meter Survey Q1 2012

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Southern Company	Total AL FL GA MS	3,998,000	4,617,000	Southern Company's Georgia Power has deployed 2,217,000 smart meters out of a planned 2,439,000; Alabama Power has fully deployed 1.48M meters; Gulf Power has deployed 292K of 449K meters; Mississippi Power has installed 6,000 and is awaiting approval by the MS PSC for full deployment of 201,000 smart meters. Southern Company is projected to reach full deployment by 2012-2013.	GA Power smart meter page ⁷⁹ ; AL Power smart meter page ⁸⁰ ; Reuters press release ⁸¹ ; Greentech Media article ⁸² ; Southern Company ⁸³ IEE Smart Meter Survey Q1 2012
State Program (Pennsylvania)	Total PA	1,409,000	6,000,000	Act 129 (signed 10/15/2008) mandates electric distribution companies with >100,000 customers to provide smart meters either to customers that request one, for newly constructed buildings, or to all customers within fifteen years. Most companies will reach full deployment well before the allotted timeline. Note: Meters related to FirstEnergy Corp, PPL, PECO, and other PA electric distribution companies included in the State Program (Pennsylvania) total are not double counted in the summary total.	PA Act 12928 ⁸⁴ ; PUC website ⁸⁵ ; smartmeters.com ⁸⁶ ; SNL ⁸⁷ ; Pittsburgh Tribune-Review ⁸⁸
Tampa Electric	Total FL	300	10,000	TECO is testing 300 smart meters in two of Tampa's most recently erected high-rise buildings. The company plans to extend the pilot to 10,000 units to test remote connect/disconnect and DSM in 2011.	metering.com ⁸⁹
Tacoma Public Utilities	Total WA	17,000	152,000	Tacoma Public Utilities has installed 17,000 smart meters and intends to deploy an additional 135,000 meters.	TPU press release ⁹⁰
Texas New Mexico Power	Total NM TX	36,100	240,000	In July 2011, the PUCT approved full deployment of 240,000 meters in TX by 2016. The utility is employing SmartSynch's residential SmartMeter solution which uses standard IP communications via public wireless networks.	TNMP ⁹¹ ; Reuters ⁹² ; PUCT 39772; IEE Smart Meter Survey Q1 2012
United Illuminating	Total CT	90,200	350,000	United Illuminating has installed 90,200 smart meters. Full deployment will be 350,000 meters.	IBM ⁹³ ; IEE Smart Meter Survey Q1 2012
Unitil	Total MA NH	105,000	105,000	Unitil has installed 76,000 smart meters to electric customers around Concord and the Seacoast in New Hampshire and 29,000 in Fitchburg, MA.	Nashua Telegraph ⁹⁴
Vermont Utilities	Total VT	32,000	300,000	VT's 20 utilities plan to install smart meters in 85 to 90 percent of homes across VT by 2013. This effort was awarded \$69M in SGIG funds.	Vermont Public Radio ⁹⁵

Utility	State	Meters Installed	Target Number of Meters	Notes	Resources
Westar Energy	Total KS	43,000	48,000	Westar is piloting smart meters in its SmartStar project in Lawrence, KS. SmartStar is a customer-centric project and all customers will be offered a personal energy web portal accompanying the smart meter installation. The project includes other infrastructure required to support system-wide deployment of smart metering. The project is expected to take between 24 and 36 months to implement, with meter installations beginning Q2 2011. Westar was awarded \$19M in SGIG funds (total project value, approx. \$40M).	SmartStar website ⁹⁶ , IEE Smart Meter Survey Q1 2012
Xcel Energy	Total CO	20,000	20,000	Xcel is piloting 20,000 smart meters as part of a smart grid system known as SmartGridCity in Boulder, CO, testing peak pricing and in-home power monitoring and management technologies.	SmartGridCity, Xcel FAQ ⁹⁷
Other Coops and Munis	Total 27 States	2,730,500	3,144,700	Information obtained from EIA, eMeter Strategic Consulting, and SmartGrid.gov indicates that 2.7M smart meters have been installed by some municipal utilities and cooperatives, with plans to deploy 3.1M by 2015. These electricity providers operate in 27 states.	eMeter Strategic Consulting; EIA Form 826--Advanced Metering Spreadsheets; Smart Grid.gov
Total as of May 2012		35,728,000	69,000,000		
Estimated Deployment by December 2015			65,000,000		

The following utilities will complete system wide deployment of smart meters by December 2012:

Alabama Power (AL); Pacific Gas & Electric (CA); Sacramento Municipal Utility District (CA); San Diego Gas & Electric (CA); Southern California Edison (CA); Black Hills Energy Corp (CO); Pepco (DC); Delmarva Power (DE); Gulf Power (FL); Georgia Power (GA); Idaho Power (ID); Bangor Hydro Electric Company (ME); Central Maine Power (ME); NV Energy (NV); Idaho Power (OR); Portland General Electric (OR); PPL (PA); Black Hills Power (SD); Austin Energy (TX); CenterPoint Energy (TX); Oncor (TX); Wisconsin Power and Light (WI); Cheyenne Light, Fuel, and Power (WY); Black Hills Power (WY)

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